To Complete Study to Determine the Feasibility of Erecting and Operating Wind Turbines

PURPOSE

The purpose of this study is to determine the feasibility of erecting and operating wind turbines at the [] property. This study will include a specific site location, turbine size and will collect information needed to implement this.

SCOPE OF WORK TO BE ADDRESSED - Wind Feasibility Study

- 1. Select best specific site based on all pertinent information.
 - a. Collect site plans: building, electrical, plot, septic, confirm ownership structure
 - b. Detailed site walk, the focus will be on four areas, 1) electrical systems, both in-house, and utility owned, and 2) identification of sensitive environmental resources (e.g. wetlands etc.) if any and 3) scoping a preliminary location(s) for a wind turbine, exact locations will be detailed via GPS, 4) neighboring properties
 - c. Collect latest electric billing data
 - d. Relate changes in operations that may change electric consumption. (e.g., equipment additions, multiple shifts)
 - e. Memo summarizing kick-off meeting, effect on project scope of work and schedule and recommended best specific site.
- 2. Prepare and submit an MRET (Commonwealth Wind Incentive Program Community Scale) grant application for **wind study feasibility funding**. The successful proposer will prepare any information needed to apply for, pursue, and be responsible for the successful submission of this grant. Grant requirements are detailed at: []
- 3. Prepare Feasibility Study based on [] recommended scope of work:
 - a. Perform Technical Feasibility Analysis
 - i. Review existing data for purposes of Study and if required, then erect meteorological tower and install data logger and anemometer
 - ii. Site Evaluation
 - 1. Description of current energy infrastructure will include electrical transformers, electric panels, wiring configuration.
 - 2. Site ownership will look at abutting properties and the potential of placing a turbine in the fall zone of an abutter.
 - Environmental resource survey
 - 4. Stakeholder identification
 - iii. Analyze Energy Use Opportunities:
 - 1. Collect data. Monthly consumption data for the past five years is available and will be processed.
 - 2. Data will be incorporated into the pro-forma tool for analysis
 - iv. Create Base Concept Cases (e.g., scenarios) for Different Technology:
 - 1. Given the energy consumption and wind resources, wind turbine systems for review and analysis:
 - a. 100-200KW range
 - 2. Various manufacturer tower heights will be analyzed.
 - v. Perform Environmental Impact Analysis
 - 1. Perform avian study
 - 2. Perform visualization study

- 3. Perform preliminary noise study
- 4. Analyze potential impacts, their severity, with mitigation options
- Analyze required environmental approvals and permits, processes and procedures and timeframes
- vi. Analyze Engineering and Interconnection Requirements.
 - 1. Analyze engineering requirements
 - Geotechnical. While no borings will be completed, assess the likely geological characteristics of the site (in all likelihood terminal moraine), and its affect on foundation design and wiring runs.
 - b. Electrical. Analyze the electrical interconnection requirements of the supplying electric utility and specify the characteristics of the required wire runs, protective relays, transformers, and metering.
 - c. Staging / Erection. Appropriate staging areas will be assessed. Erection needs, including crane capacities will be determined.
 - 2. Analyze required building approvals and permits, processes and procedures and timeframes
- vii. Write up findings into Technical Analysis
- b. Perform Economic Feasibility Analysis
 - i. Collect for major scenarios major costs. Estimated costs will be collected in parallel to the technical analysis. Major costs (e.g., turbine, tower, transformer, construction) will be estimated for each wind turbine system
 - ii. Perform Wind Resource Assessment.
 - 1. Review existing site-specific anemometers data
 - 2. Gather, correlate and analyze wind resources from other local data sources
 - iii. Research different financing options
 - 1. Hosts financial strengths, weaknesses and preferences.
 - 2. Potential financing options to match host
 - 3. Private funding sources for multi-use tower/space options
 - iv. Investigate potential and need for long-term contracts, and likely price points.
 - 1. Inquiries will be made to RECs wholesalers on the availability, interest and price of long-term contracts.
 - 2. For third party ownership options, price points and terms of power purchase agreements
 - v. Project Costs and Revenues for combination of development, financing, and revenue scenarios
 - 1. Create analysis of third-party ownership of turbine
 - 2. Run numerous scenarios investigating financial reward in terms IRR, NPV, and years to positive cash flow. Scenarios will be run varying numerous aspects, including financing options, and system configurations.
 - 3. Run sensitivity analysis for variation in major factors, including wind resources, cost of avoided generation, REC and LMP revenue, construction costs, interest and inflation rates, etc.
 - vi. Provide project pro-forma(s) for recommended or alternative structures. Provide detailed cash flows for selected primary alternatives.
 - vii. Write up findings into Economic Analysis. Model details and assumptions, charts and tables will make clear the potential project financial impacts.
- c. Prepare recommended next steps for further development of the wind project.
- 4. Package Findings and Analysis into Feasibility Study with Recommendations

- a. Draft Final Report
- b. Final Report
- 5. Presentation of Feasibility Study to Decision Makers
 - a. Prepare a presentation intended for a [] audience. At minimum, attendance at three [] Board meetings should be expected to complete this task.
 - **b.** Prepare a separate presentation appropriate to be submitted by the []
- 6. (If applicable) Prepare and submit an MRET (Commonwealth Wind Incentive Program Community Scale) grant application for wind **design and construction** funding. The successful proposer will prepare any information needed to apply for, pursue, and be responsible for the successful submission of this grant. Grant requirements are detailed at []
 - a. Prepare a scope of work for design and construction of a wind project
 - b. At minimum, attendance at 3 [] Board meetings should be expected to complete this task.
 - c. At minimum, attend three on-island meetings with the facilities group and ad-hoc Wind Advisory group working with the [1]
- 7. Review existing data and information the facilities group and ad-hoc Wind Advisory group has collected in support of the Feasibility Study and use as appropriate.

Minimum Evaluation Criteria

At a minimum, provide the following information with your firm's response. (Some of these criteria are expanded upon and can be included as part of your Evaluation criteria.)

- 1. Timely submission of proposal.
- 2. Correctly following the terms and conditions of this RFP.
- 3. A Letter of Transmittal, including [] specific experience and a list of all specific experience working on similar reviews and grant applications, signed by the individual authorized to negotiate for and to submit a proposal, and any related votes of the corporation or Board of Directors as necessary as proof of authorization.
- 4. Completed disclosure of beneficial interest in real property transaction as required
- 5. Fully executed forms as provided in this RFP (proposal, non collusion certificate, etc.)
- 6. A copy of the appropriate licenses required by Federal, State, and/or local authorities.

A statement that your firm is not debarred suspended or otherwise prohibited from practice by any Federal, State, or local agency.

III. FORM OF PROPOSAL

The Proposer shall submit in separate, clearly identified, sealed envelopes a non-price proposal and price proposal.

First, [] shall open and evaluate the non-price proposals according to Section IV of this RFP. Then [] shall open the price proposals, and select the most advantageous proposal based on proposal ratings and the proposal prices.

Non-Price Proposal

The non-price proposal shall consist of all materials and information, other than price, required in this RFP. The non-price proposal shall include a <u>Plan of Service</u> that details the following:

- 1. A description of Contractors qualifications, experience, organization and resources, which must pay specific attention to the programming, planning, design and construction of wind turbine projects. Description must include:
 - a. Experience with, or involvement in developing a municipal, state, federal or educational facility wind turbine system
 - b. Resumes describing the educational and work experiences for each of the key staff (including sub-contractors) that would be assigned to this project; these key staff shall retain project involvement and oversight throughout the course of the project
- 2. Listing of at least three facilities studies and construction projects completed by their company that are similar to the one being proposed. Listing shall include for each project:
 - a. Brief description of the project (including services provided);
 - b. Details of the proposing company's role(s) in the project;
 - c. Project references (name of the organization, contact person or responsible official, address, telephone and fax numbers, e-mail address);
 - d. Start and end dates of services:
 - e. Specific details of originally proposed project budget and time of completion and final project budget and time of completion
- 3. Description of programming, planning and design techniques to be used in approaching the project. Close attention will be paid to the Contractors knowledge and understanding of:
 - a. Educational facilities and wind turbine projects;
 - b. State and federal statutes, regulations and codes for the same; and
 - c. Specific experience with specialized facilities and local populations.
- 4. Listing of other consultants who will participate in this project and their area of expertise.
- 5. Indicate individual staff availability and tentative timetable (in the form of a chart) for the project development, programming and preliminary design phases, using a theoretical start date of [].
- 6. State clearly any limitations you wish to include in Agreement and advise of any conditions you may have.

B. Price Proposal Requirements

The price proposal shall consist of a lump sum to provide all services and deliverables.

Proposer shall include an itemized listing of all materials, man hours and tasks included in the proposal. There shall be no reimbursable expenses allowed under this contract.

IV. PROPOSAL EVALUATION PROCEDURE

[] will evaluate proposals according to the quality requirements contained below. Submittals failing to comply with one or more of the quality requirements stated below shall be disqualified from further consideration.

Submittals that comply with the quality requirements will be further evaluated based on the comparative criteria detailed below. Each proposal will be assigned a rating for each comparative criterion and a composite rating.

Three finalists will be identified from the evaluation of comparative criteria. [] will rank these finalists. Price proposal will then be considered. [] may interview the three finalists as part of its evaluation. [] will negotiate a contract with the highest ranked finalist who proposes a price within []' budgeted amount. [] reserves the right to reject any and all proposals if such rejection is in its best interest.

QUALITY CRITERIA

- 1.) Proposer has been a consultant actively engaged in the field of alternative energy sources for a minimum of ten (10) years.
- 2.) Proposer has all licenses/certifications necessary for completing this project.
- 3.) Proposer has means and ability to start project immediately after awarded and complete in timely manner.
- 4.) Proposer has completed at least four (4) projects with D&E planning comparable to this one and can demonstrate some experience with Nantucket issues.

Comparative Criteria

Relevant experience of the proposer with like projects:

HA – Proposers lead has 10+ years experience

A – Proposers lead has 8 to 10 years experience

NA – Proposers lead has less than 8 years experience.

Time line provided in plan of service

HA: Proposers timeline indicates that all plans and bid documents shall be completed within 30 days or less from the fully executed contract date.

A: Proposers timeline indicates that all plans and bid documents shall be completed after 30 days but within 60 days of the fully executed contract date.

NA: Proposers timeline indicates that all plans and bid documents shall be completed after 60 days of the fully executed contract date.

Experience in working with Design & Engineering (D&E) Planning on Similar Projects

HA: Proposer has completed six or more projects in D&E planning

A: Proposer has completed at least three but not more than five projects in D&E planning

NA: Proposer has completed less than three projects in D&E planning

V. RULE FOR AWARD.

[] will determine the most advantageous proposal from a responsible and responsive proposer, taking into consideration fixed price and all evaluation criteria set forth in the RFP.

VI. BASIS OF COMPENSATION.

The contract awarded will be a fixed price contract.